

ALMANAC LI TRANSITS OF SATURN IN BCE

The almanac LI contains a list of transits of Saturn from the 125th millennium BCE to the 1st millennium BCE.

During the period of 250 000 years, the total number of transits of Saturn is 201 transits of Saturn (67 transits of Saturn visible from Uranus, 125 transits of Saturn visible from Neptune, 9 transits of Saturn visible from Pluto).

FROM	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
TRANSIT								
TIME								
Uranus	-124708-05-22	23:03 J	-43828031.99	-43828031.54	-43828031.03	0.0136	0.0086	
Uranus	-121351-08-05	05:17 J	-42601813.78	-42601813.28	-42601812.76	0.0134	0.0069	
Neptune	-121227-07-31	11:17 J	-42556527.27	-42556527.03	-42556526.65	0.0089	0.0080	
Neptune	-120651-03-03	21:37 J	-42346293.20	-42346292.60	-42346291.94	0.0089	0.0032	
Uranus	-119672-04-01	11:46 J	-41988684.56	-41988684.01	-41988683.43	0.0133	0.0038	

Neptune -119254-07-27 00:29 J -41835893.86 -41835893.48 -41835893.06 0.0089 0.0072
 Neptune -116705-02-13 22:05 J -40905035.18 -40905034.58 -40905033.90 0.0089 0.0038
 Pluto -115707-09-01 20:10 J -40540315.34 -40540314.66 -40540313.90 0.0065 0.0020
 Neptune -115308-08-03 10:48 J -40394609.41 -40394609.05 -40394608.61 0.0089 0.0070
 Neptune -114732-01-08 18:58 J -40184432.37 -40184431.71 -40184431.00 0.0089 0.0029
 Neptune -113335-09-17 14:10 J -39673926.29 -39673925.91 -39673925.49 0.0088 0.0070
 Neptune -112760-07-26 18:00 J -39463960.17 -39463959.75 -39463959.16 0.0089 0.0065
 Neptune -112187-08-17 06:43 J -39254650.82 -39254650.22 -39254649.56 0.0088 0.0020
 Neptune -111612-02-11 01:55 J -39044818.94 -39044818.42 -39044817.80 0.0089 0.0056
 Neptune -111039-11-20 14:38 J -38835248.27 -38835247.89 -38835247.36 0.0088 0.0063
 Neptune -110715-01-26 03:36 J -38717205.91 -38717205.35 -38717204.73 0.0088 0.0037
 Neptune -110393-12-09 04:19 J -38599277.94 -38599277.32 -38599276.64 0.0088 0.0011
 Neptune -110069-01-26 20:09 J -38481254.20 -38481253.66 -38481253.02 0.0088 0.0041
 Neptune -109676-04-30 06:14 J -38337616.73 -38337616.24 -38337615.70 0.0089 0.0058
 Neptune -109353-01-18 06:43 J -38219743.86 -38219743.22 -38219742.53 0.0089 0.0013
 Neptune -109030-02-16 21:50 J -38101738.19 -38101737.59 -38101736.91 0.0089 0.0022
 Neptune -108707-01-16 18:14 J -37983793.29 -37983792.74 -37983792.08 0.0089 0.0035
 Neptune -107810-05-24 00:14 J -37656036.71 -37656036.49 -37656036.16 0.0089 0.0082
 Neptune -107236-01-23 09:35 J -37446503.28 -37446503.10 -37446502.78 0.0089 0.0082
 Neptune -106663-12-31 06:14 J -37236873.63 -37236873.24 -37236872.68 0.0089 0.0068
 Neptune -104690-08-13 04:04 J -36516375.95 -36516375.33 -36516374.69 0.0089 0.0043
 Uranus -104521-01-11 08:38 J -36454862.74 -36454862.14 -36454861.51 0.0146 0.0014
 Neptune -102717-04-22 02:09 J -35795849.92 -35795849.41 -35795848.79 0.0089 0.0053
 Neptune -102143-12-26 09:49 J -35585948.63 -35585948.09 -35585947.48 0.0088 0.0046
 Uranus -99530-08-08 23:30 J -34631689.92 -34631689.52 -34631688.99 0.0136 0.0097
 Neptune -98771-01-12 13:40 J -34354673.56 -34354672.93 -34354672.25 0.0089 0.0026
 Neptune -96798-02-02 22:18 J -33634014.18 -33634013.57 -33634012.86 0.0089 0.0022
 Uranus -95540-09-10 16:18 J -33174308.89 -33174308.82 -33174308.63 0.0140 0.0138
 Neptune -95399-01-04 14:23 J -33123058.56 -33123057.90 -33123057.19 0.0088 0.0018
 Uranus -86559-05-18 08:08 J -29894114.77 -29894114.16 -29894113.54 0.0134 0.0042

Uranus	-84924-03-20 02:37 J	-29296990.02	-29296989.39	-29296988.75	0.0145	0.0014
Uranus	-84881-06-06 22:47 J	-29281204.89	-29281204.55	-29281204.09	0.0133	0.0104
Neptune	-83312-11-02 19:40 J	-28707979.26	-28707978.68	-28707978.03	0.0089	0.0045
Uranus	-83246-06-22 12:42 J	-28684006.14	-28684005.97	-28684005.69	0.0147	0.0138
Uranus	-83203-10-02 16:18 J	-28668198.17	-28668197.82	-28668197.42	0.0132	0.0106
Uranus	-82793-02-25 16:18 J	-28518665.40	-28518664.82	-28518664.19	0.0131	0.0018
Uranus	-82747-03-10 07:11 J	-28501850.39	-28501850.20	-28501849.92	0.0148	0.0138
Uranus	-82474-01-26 18:56 J	-28402180.17	-28402179.71	-28402179.14	0.0138	0.0077
Uranus	-82432-09-29 04:47 J	-28386593.70	-28386593.30	-28386592.77	0.0139	0.0100
Uranus	-82384-05-21 03:49 J	-28369192.75	-28369192.34	-28369191.89	0.0135	0.0096
Uranus	-82066-04-07 23:30 J	-28253086.59	-28253086.52	-28253086.32	0.0145	0.0143
Uranus	-81933-08-25 22:32 J	-28204367.91	-28204367.56	-28204367.15	0.0136	0.0109
Uranus	-81434-09-06 19:25 J	-28022097.06	-28022096.69	-28022096.24	0.0134	0.0102
Uranus	-80388-02-22 11:30 J	-27640241.55	-27640241.02	-27640240.40	0.0146	0.0075
Uranus	-80345-04-18 14:37 J	-27624480.50	-27624479.89	-27624479.26	0.0132	0.0016
Neptune	-78542-12-05 13:40 J	-26965704.62	-26965703.93	-26965703.20	0.0089	0.0010
Uranus	-77577-02-05 18:13 J	-26613541.24	-26613540.74	-26613540.18	0.0131	0.0063
Uranus	-77032-07-05 05:59 J	-26414329.95	-26414329.25	-26414328.55	0.0147	0.0005
Neptune	-75993-03-31 03:49 J	-26034930.65	-26034930.34	-26034929.92	0.0088	0.0075
Uranus	-73087-12-02 06:57 J	-24973268.87	-24973268.21	-24973267.50	0.0147	0.0037
Pluto	-70859-04-16 10:33 J	-24159721.63	-24159721.06	-24159720.42	0.0079	0.0028
Neptune	-69825-05-12 17:30 J	-23782026.41	-23782025.77	-23782025.10	0.0089	0.0003
Neptune	-69250-08-24 12:57 J	-23571904.65	-23571903.96	-23571903.22	0.0088	0.0018
Uranus	-69141-06-05 17:59 J	-23532171.37	-23532170.75	-23532170.10	0.0146	0.0053
Neptune	-67852-08-21 00:13 J	-23061288.13	-23061287.49	-23061286.85	0.0089	0.0002
Neptune	-67277-05-29 17:16 J	-22851352.48	-22851351.78	-22851351.01	0.0089	0.0013
Neptune	-65879-12-03 10:47 J	-22340545.68	-22340545.05	-22340544.41	0.0089	0.0002
Neptune	-63905-02-29 05:16 J	-21619819.65	-21619819.28	-21619818.77	0.0089	0.0065
Uranus	-63517-12-16 08:23 J	-21477811.72	-21477811.15	-21477810.55	0.0142	0.0050
Neptune	-63332-07-19 14:52 J	-21410390.56	-21410389.88	-21410389.16	0.0089	0.0031

Neptune -62757-04-04 01:11 J -21200477.98 -21200477.45 -21200476.86 0.0089 0.0043
 Neptune -60461-03-05 16:04 J -20361893.49 -20361892.83 -20361892.16 0.0088 0.0011
 Neptune -60138-04-11 11:59 J -20243881.07 -20243881.00 -20243880.77 0.0088 0.0087
 Neptune -59889-08-30 22:04 J -20152791.95 -20152791.58 -20152791.04 0.0089 0.0068
 Neptune -59566-05-25 15:35 J -20034914.42 -20034913.85 -20034913.16 0.0089 0.0036
 Neptune -59243-07-09 13:40 J -19916893.46 -19916892.93 -19916892.32 0.0089 0.0047
 Neptune -58920-05-15 21:21 J -19798971.99 -19798971.61 -19798971.08 0.0089 0.0065
 Neptune -58847-04-10 05:30 J -19772344.70 -19772344.27 -19772343.69 0.0088 0.0065
 Neptune -58525-12-10 12:42 J -19654489.66 -19654488.97 -19654488.20 0.0088 0.0016
 Neptune -58202-08-19 18:42 J -19536627.40 -19536626.72 -19536625.97 0.0088 0.0023
 Neptune -57879-01-24 20:09 J -19418858.27 -19418857.66 -19418856.95 0.0088 0.0040
 Neptune -57305-08-11 11:30 J -19209005.50 -19209005.02 -19209004.43 0.0089 0.0050
 Neptune -56982-05-20 03:21 J -19091113.76 -19091113.36 -19091112.84 0.0089 0.0063
 Neptune -56409-06-05 05:30 J -18881808.56 -18881808.27 -18881807.78 0.0089 0.0075
 Neptune -55834-05-08 10:47 J -18671818.48 -18671818.05 -18671817.51 0.0089 0.0061
 Neptune -53288-02-02 00:57 J -17741987.09 -17741986.46 -17741985.76 0.0089 0.0023
 Neptune -52713-03-22 16:04 J -17531919.23 -17531918.83 -17531918.29 0.0088 0.0066
 Neptune -51316-12-03 15:21 J -17021409.48 -17021408.86 -17021408.16 0.0089 0.0020
 Neptune -50741-12-22 12:13 J -16811371.36 -16811370.99 -16811370.52 0.0088 0.0071
 Neptune -49342-01-05 08:37 J -16300738.32 -16300738.14 -16300737.85 0.0089 0.0083
 Neptune -47370-12-03 22:47 J -15580132.78 -15580132.55 -15580132.14 0.0089 0.0079
 Neptune -45396-01-23 21:21 J -14859442.85 -14859442.61 -14859442.23 0.0089 0.0079
 Neptune -43998-09-20 01:11 J -14348584.45 -14348584.45 -14348584.44 0.0088 0.0088
 Uranus -42785-10-28 18:28 J -13905497.04 -13905496.73 -13905496.35 0.0132 0.0112
 Uranus -39973-12-03 13:40 J -12878378.50 -12878377.93 -12878377.35 0.0147 0.0064
 Pluto -39752-05-25 00:14 J -12797850.86 -12797850.49 -12797849.98 0.0079 0.0062
 Uranus -34348-04-05 14:23 J -10824089.31 -10824088.90 -10824088.38 0.0145 0.0103
 Uranus -32125-06-25 04:19 J -10012057.92 -10012057.32 -10012056.69 0.0134 0.0018
 Uranus -30446-02-12 21:21 J -9398936.20 -9398935.61 -9398934.99 0.0135 0.0023
 Uranus -30402-02-07 09:50 J -9382870.43 -9382870.09 -9382869.64 0.0143 0.0117

Pluto	-30164-10-15 01:40 J	-9295691.12	-9295690.43	-9295689.67	0.0066	0.0011
Uranus	-28178-03-23 09:21 J	-8570510.72	-8570510.11	-8570509.49	0.0135	0.0004
Uranus	-27589-11-02 10:04 J	-8355153.63	-8355153.08	-8355152.49	0.0134	0.0048
Uranus	-27545-05-06 11:59 J	-8339262.62	-8339262.00	-8339261.30	0.0144	0.0037
Neptune	-27140-10-01 10:04 J	-8191188.71	-8191188.08	-8191187.38	0.0089	0.0014
Uranus	-26999-07-02 23:45 J	-8139779.09	-8139778.51	-8139777.90	0.0134	0.0026
Uranus	-26955-02-13 20:09 J	-8123847.27	-8123846.66	-8123845.98	0.0144	0.0046
Neptune	-26565-11-08 03:21 J	-7981131.97	-7981131.36	-7981130.65	0.0088	0.0031
Uranus	-26229-07-01 19:26 J	-7858537.16	-7858536.69	-7858536.21	0.0132	0.0082
Uranus	-26182-03-29 23:16 J	-7841465.17	-7841464.53	-7841463.84	0.0146	0.0023
Uranus	-26139-08-23 09:50 J	-7825612.70	-7825612.09	-7825611.47	0.0133	0.0019
Uranus	-26049-11-18 14:38 J	-7792652.33	-7792651.89	-7792651.35	0.0135	0.0084
Uranus	-25501-03-08 23:16 J	-7592749.95	-7592749.53	-7592749.02	0.0142	0.0098
Neptune	-24592-09-26 15:35 J	-7260536.34	-7260535.85	-7260535.22	0.0088	0.0057
Uranus	-24322-06-05 23:31 J	-7162032.00	-7162031.52	-7162030.96	0.0140	0.0080
Uranus	-23101-10-28 21:36 J	-6715915.85	-6715915.60	-6715915.22	0.0138	0.0121
Uranus	-21422-06-06 10:33 J	-6102806.69	-6102806.06	-6102805.43	0.0137	0.0003
Neptune	-17849-06-20 22:19 J	-4797753.17	-4797752.57	-4797751.88	0.0089	0.0043
Neptune	-15876-03-04 12:14 J	-4077223.71	-4077222.99	-4077222.26	0.0089	0.0001
Neptune	-13904-10-04 01:40 J	-3356737.07	-3356736.43	-3356735.71	0.0089	0.0027
Neptune	-13328-05-24 01:40 J	-3146486.00	-3146485.43	-3146484.78	0.0088	0.0038
Neptune	-9885-10-23 04:33 J	-1888777.90	-1888777.31	-1888776.60	0.0088	0.0039
Neptune	-9312-08-16 01:12 J	-1679558.05	-1679557.45	-1679556.79	0.0089	0.0022
Neptune	-8989-06-12 12:43 J	-1561646.52	-1561645.97	-1561645.38	0.0089	0.0040
Neptune	-8666-09-26 01:55 J	-1443565.48	-1443565.42	-1443565.21	0.0089	0.0088
Neptune	-8343-10-06 13:12 J	-1325579.29	-1325578.95	-1325578.51	0.0089	0.0071
Neptune	-8020-09-12 18:57 J	-1207627.06	-1207626.71	-1207626.21	0.0089	0.0068
Neptune	-7697-12-22 22:33 J	-1089549.95	-1089549.56	-1089549.03	0.0089	0.0064
Neptune	-7374-11-17 02:09 J	-971610.94	-971610.41	-971609.78	0.0089	0.0042
Neptune	-6478-04-22 11:02 J	-644555.64	-644555.04	-644554.33	0.0088	0.0031

Neptune	-5580-07-17 19:40 J	-316474.07	-316473.68	-316473.16	0.0089	0.0068
Uranus	-4635-07-19 21:50 J	28688.84	28689.41	28690.02	0.0133	0.0047
Pluto	-2430-10-18 20:38 J	834155.85	834156.36	834157.00	0.0080	0.0050
Neptune	-1886-05-04 10:47 J	1032684.37	1032684.95	1032685.60	0.0089	0.0028